

**Appendix E**  
**Technical Specifications**

**EVAPORATION POND INTERIM REMOVAL  
ACTION FOR THUMB POND AND SUB AREA A**

BIDDER: \_\_\_\_\_

BIDDER  
INITIALS: \_\_\_\_\_

**BID FORM**

BID ITEM NO.	APPROXIMATE QUANTITY (1)	UNITS	ITEM DESCRIPTION UNIT PRICE, LUMP SUM OR T&M	UNIT PRICES	AMOUNT
1	1	LS	MOBILIZATION (10% of Items 2 through 5)	\$ _____/Each	\$ _____
2	139,000	SF	NORTH VLT HAUL ROAD NETWORK	\$ _____/SF	\$ _____
3	44,000	BCY	THUMB POND INTERIM DUST COVER	\$ _____/BCY	\$ _____
4	525,000	SF	SOUTH VLT HAUL ROAD NETWORK	\$ _____/SF	\$ _____
5	31,700	BCY	SUB AREA A (SAA) INTERIM DUST COVER	\$ _____/BCY	\$ _____
6	1	LS	FINAL CLEAN UP	\$ _____/LS	\$ _____
7	1	LS	FORCE ACCOUNT ALLOWANCE FOR ROAD AND MISCELLANEOUS REPAIRS (5% of Items 2 through 5)	\$ _____/LS	\$ _____
		TOTAL:	\$ _____		\$ _____
			WRITTEN TOTAL OF ALL ITEM PRICES		
			NUMERIC TOTAL OF ALL ITEM PRICES		

## SECTION 01010

### SUMMARY OF WORK

#### 1.0 GENERAL

The Contract includes the project work described in the Administrative Order of Consent and Scope of Work (AOC/SOW, May, 2009) between the United States Environmental Protection Agency (EPA) and the Atlantic Richfield Company (ARC) for an interim removal action for the Anaconda Evaporation Ponds located on the Yerington Mine Site, Yerington Nevada. The Yerington Mine Site is approximately a 3,600 acre restricted access area located approximately 1 mile west of the incorporated town of Yerington, NV. The mine site hosted several extended periods of copper mining operations during the twentieth century that resulted in development of a pit, waste rock dumps, tailings piles, heap leach pads, recycle ponds, evaporation ponds, process ponds and appurtenant mine process support infrastructure. The Anaconda Mining Company (Anaconda) operated the mine site from 1953 until it ceased operations in 1978. The last mine property owner, Arimetco, operated the property for approximately a 12 year period prior to filing for bankruptcy in 2000 and abandoning the property. Subsequent to Arimetco's bankruptcy filing, Nevada Department of Environmental Protection (NDEP) initiated contingency closure operations and reclamation under Nevada State's abandoned mine program. The site was listed in 2004 as an abandoned mine site under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). As a result of the CERCLA listing, United States Environmental Protection Agency (EPA) was appointed with operational jurisdiction of the site on behalf of the current Owner, the United States Federal Bankruptcy Court. Under CERCLA, ARC entered into a consent agreement in May, 2009 with EPA under the AOC/SOW for clean up of facilities that been previously operated by its defunct subsidiary, Anaconda. In addition to this removal action, ARC performs site specific operation and maintenance tasks for EPA under the reference AOC/SOW which includes site wide accessibility.

Site wide hazards stated in the EPA's CERCLA site listing include potential exposure to metals, radiochemicals, dust and low pH fluids. All on-site personnel are required to be 40-hour HAZWOPER trained and to fully abide with the Contractor's submitted Health and Safety Program (HASP) to provide for a safe working environment of all project work. The HASP shall also include consideration of exposure to commonly conventional hazards such as slips, trips, falls, climate exposure and biological threats typically anticipated with similar construction work sites.

#### 2.0 PROJECT DESCRIPTION

The project work is within the Yerington Mine Site Operable Units OU-4 and OU-6. The OU-4 Evaporation Ponds and Sulfide Tailings Unit will receive fill materials with borrow materials coming from OU-6 Oxide Tails Unit. The project work will complete placement of Vat Leach Tails (VLT) in an 18-inch average thickness cover on two tailings ponds – the Thumb Pond and Sub Area A (SAA). The covers for the Thumb Pond and SAA will receive moderate compaction, with minor moisture conditioning for compaction and as required to control dust. Addition of moisture will be

required along access roads to maintain compaction and dust control as required by field conditions. The specific project work includes but is not limited to the following removal action item:

- **Preparatory Work:** Contractor Mobilization which shall also include installation/improvement of all existing access roads, construction water improvements, vehicle wash bays, survey references, traffic plan and controls, Contractor HSSE signage, exclusion areas and complete site training of all site personnel
- **North Haul Road Access Network:** Complete grading and installation of fill material haulage network to facilitate material transport from the North VLT borrow area on to the Thumb Pond. The road is specifically excluded from infringing on the VLT leach pad.
- **Thumb Pond:** Approximately 22-acre area previously covered with VLT material in a prior removal action. Project work will be to supplement this cover with an average 18-inch thick compacted (85% MDD ASTM D 698) contour dust mitigation cover across the entire flat lying tails area to the confining berms.
- **South VLT Haul Road Access Network:** Complete grading and installation of fill material haulage network to facilitate material transport from the South VLT borrow area to the Sub Area A. The road will extend along existing site maintenance roads and new constructed alignments. The Contractor will need to plan and install appropriate measures along the existing road sections to safely separate construction and maintenance traffic. The road will extend across disturbed native ground and tailings fill areas. The tailings fill area consists of drained tailings material with a VLT covering. The road extending across the sulfide tailings is anticipated to require a 12-inch road base to facilitate extended rubber tired equipment access.
- **Sub Area A (SAA):** Approximately a 7.2 acre area requiring approximately an 8 acre cover of sulfide tailings recycling pond area. Project work will place a minimum of an 18-inch lightly compacted VLT cover (85% MDD ASTM D-698 – to 6 inches only) on delineated tailings area. The pioneering cover into the project work area will require bi-axial geo-grid to initiate a stable platform to work from along the existing berm road. Existing fluids within this pond are to be treated as low pH.
- **Demobilization:** Final site clean up and decontamination, final grading of access roads, dismantling of traffic controls, documentation and record drawings.

### 3.0 WORK OF THIS CONTRACT

Work to be performed under this Contract includes:

1. Complete preparatory work including all site HSSE personnel training, installation of roads, site office, construction water systems, communications, traffic control, survey offsets, signage and exclusion zones.
2. Complete preparation of North VLT Haul Road access network including preparation of existing and new roads required for facilitating fill operations to the Thumb Ponds as shown on the Plans.

3. Excavate, transport, dump and spread VLT tailings per Plans and Specifications on Thumb Pond to complete contoured dust mitigation cover.
4. Complete preparation of South VLT Haul road access network including preparation of existing and new roads required for facilitating fill operations to the SAA shown on the Plans.
5. Excavate, transport, dump and spread VLT tailings per Plans and Specifications on Sub Area A to complete non-contoured dust mitigation cover.
6. Complete final clean up including establishing best management practices (BMPs) for borrow source areas and remaining haul roads, provide all construction reports documenting placement of all cover materials.
7. Any and all other work necessary for a complete project as described in the Plans and Specifications.

Quantities are approximate as defined per Contract Documents, Plans and Specifications. Actual placed quantities shall be determined by construction surveys. Pay quantities are subject to the conditions as described in the Contract Documents, Plans and Specifications.

**\*\*END OF SECTION\*\***

## SECTION 01014

### WORK SEQUENCE AND LIMITATIONS

#### 1.0 CONTINUITY OF SITE OPERABLE SYSTEMS

##### A. GENERAL:

The Yerington Mine is not in production but ARC operates several facilities across the site to maintain compliance with EPA requirements and waste water utilities for Weed Heights. These systems include:

1) Anaconda Pump Back Well System (PWS) – Located along the Anaconda PWS evaporation pond and the separation berm for the North and Middle Lined Evaporation Pond. The PWS consists of 11 shallow wells, buried power cables, discharge pipes, vaults, pitless adapters and appurtenant infrastructure. The system is temporarily mothballed but is to remain intact to resume operations as required by EPA. Site O&M personnel will require access to this area during the course of the work day.

2) Bird Mitigation Systems – In place infrastructure for mitigating bird contact with low pH fluids consist of bird scare propane cannons and Bird Gard Pro Repeller Towers (Bird Gard Units). The active propane cannons are located at the FMS Evaporation pond and the Slot Pond. The active Bird Gard Units are located around the PWS evaporation ponds and the Middle/South separation berm within the Lined Evaporation Pond. Site O&M personnel will require access to this area during the course of the work day.

3) Arimetco Fluid Management System – The Arimetco FMS is a system of pipes, pumps, overhead and surface power lines that manage low pH draindown fluids from several heap leach pads. The fluids drain out of the heap leach pads and collected in adjacent collection ponds. The fluids are pumped or gravity fed through a system of HDPE pipes to the FMS Evaporation Pond. Currently pumps are operated at the Slot Pond, Phase I Pond and VLT Pond. An exclusion Zone shall be established around the VLT Pond and Pumping Equipment. Site O&M personnel will require access to this area during the course of the work day.

4) Site Security System – The entire mine site is a restricted access area facilitated by fences and locked gates. Gates are to be locked at all times. Locks are combination which will be provided to the Contractor.

5) Weed Heights Sewage Lagoons – The northwest corner of the Thumb Pond share a common separation berm with the waste water treatment sewage lagoons for Weed Heights (WWTF). The WWTF consists of two active lined sewage lagoons with a perimeter separation berm. Influent from Weed Heights is conveyed along a 10-inch diameter gravity sewer main which is in the LEP/Thumb Pond road which will need to remain operational during construction. The Contractor will be required to install a protective soil covering for any construction activity on the

North VLT Haul Road. An Exclusion Zone shall be established around the entire facility along existing berm road.

6) Monitoring Wells and Piezometers – The mine site has an extensive ground water monitoring well network established for on going studies and monitoring. Typically monitoring events occur on a quarterly basis for the mine site. Access to monitoring wells shall remain intact and be established with Exclusion Zones for construction traffic. Site O&M personnel will require access to this area during the course of the work day.

#### B. SITE ACCESS BY OTHER CONTRACTORS

The site is subject to ongoing studies, inspections and other removal actions. These activities will not be coordinated by ARC with the Contractor. The Contractor shall maintain strict adherence with established traffic control plans, site communication and Contractor HSSE plans to maintain safe access roads and work areas that mitigate impeding the work of other on-site contractors.

### 2.0 GENERAL SITE AND CONSTRUCTION REQUIREMENTS

Construction shall be completed Monday through Friday during daylight hours, except work started that must be completed to prevent environmental damage may be completed on Saturday and Sunday with the provision that adequate ARC QA/QC representation is present during execution of the work. The construction schedule, as described in Section 01310, shall provide for the following:

#### A. SITE REQUIREMENTS:

The project work will be performed on a CERCLA site requiring personnel executing the on-site work be current in 40-hour and annual HAZWOPER training and perform work in compliance with Contractor HSSE plan and site restrictions. Any modifications to the project work scope shall be requested in writing with sufficient time for ARC review prior to execution of the work.

#### B. GENERAL REQUIREMENTS:

Contractor shall observe the following general requirements:

1. Contractor shall sign in and sign out all personnel, subcontractors and vendors at the main mine office at 1 Austin Way, Yerington NV. Sign out sheet will require checking off the ability of the on-site personnel capable of performing their assigned task and a personal activated cell phone with number.
2. Access on to the mine site will be from the main gate on the north side of Burch Road. Equipment and deliveries will not be permitted to queue in Burch Road Right of Way.

3. Contractor shall maintain a communications network that provides direct interconnected radio contact with on-site supervisors, equipment operators and traffic control personnel. Contractor shall provide two additional handsets to the ARC QA/QC representative.

### 3.0 QUALITY ASSURANCE/QUALITY CONTROL AUTHORITY

ARC will appoint a Quality Assurance and Quality Control (QA/QC) Representative for observing and inspecting compliance with the Plans and Specifications. The ARC designated QA/QC representative will provide the Contractor updates on the quality of the work and inspections as requested by the Contractor. EPA may appoint an independent QA/QC Inspector for review of the project work progress and quality. EPA QA/QC concerns or comments will be relayed to the ARC QA/QC representative who will address these concerns with the Contractor. The EPA QA/QC monitor shall not direct the Contractor in the field on routine project execution unless the concern definitively addresses an issue of imminent danger impacting on-site personnel safety or health.

### 4.0 CONSTRUCTION SEQUENCING AND LIMITATIONS

The following are intended to describe the suggested sequence of critical events necessary to minimize disruption to other ARC and EPA site activities described above, to properly coordinate between related contracts to mitigate geotechnical difficulties and to work towards compliance with AOC/SOW requirements. By following the suggested sequence for any procedure described in this section in no way relieves Contractor of his responsibilities as outlined in the General Conditions of these contract documents. It shall be understood and agreed by Contractor that the events described herein are not all inclusive and that additional items of work not described may be required to minimize disruption and comply with the contract documents and permit requirements.

#### A. CONSTRUCTION START MEETING:

The date of Construction Start Meeting shall be provided in the Notice to Proceed. Contractor shall provide all submittals and project schedule within timeframe as specified in the Supplemental Conditions. This meeting will review the requirements necessary prior to starting including certifications, acceptance of Contractor Health Site Safety and Environmental (HSSE) manual, procedures and protocols, and implementation schedule. Contractor should anticipate installation of all required traffic controls prior to initiating work in specific project areas in the schedule.

#### B. MOBILIZATION:

ARC will provide the Contractor space for mobilization to the mine site in the vicinity of the existing Blue Maintenance Shed. The access road to this site is one of the main site maintenance roads which will typically include additional traffic from other on-going mine site project work. The Contractor is responsible for maintaining the road for access per the Contract Documents.



Upon access to the site the Contractor shall install or implement the necessary traffic control devices, communication protocols, safety procedures, signs, existing infrastructure protection and BMP's prior to initiating excavation activities.

#### C. ROAD PREPARATION

The project work will require establishing access and haul roads from the borrow source areas to the respective pond work areas. Several roads as indicated on the plan maps are maintained at current widths for maintenance access. The plans base haul road widths on a minimum of 30-foot wide for one way roads, 60-foot width for two way roads and 48 foot wide roads for one way haul roads with return 18 foot maintenance roads. Contractor will need to incorporate grading and barrier installation as a component of the project work to comply with safety and physical access requirements of all Contractor proposed equipment.

The access road to the south SAA project work area will traverse across from the south VLT oxide tailings borrow area across several ramps and berms through reclaimed sulfide tailings to the SAA that will need to be reworked to safe functional access ways. The material within the existing berms consists of VLT material and can be used as a portion of the necessary material to configure the road. The plans also identify a section of existing maintenance road that will need to be widened from the approximately 25 feet existing width to the 48 foot to facilitate the one way haul road return maintenance road. The remainder of the existing roads are anticipated to meet the required widths without additional widening

New roads will need to be constructed to gain access on to softer tailings sediments within the limits of the evaporation ponds. Rubber tired equipment will require pioneer roads of appropriate width and thickness to support the weight on the softer tailings sediments. The softer sediments are prevalent on the SAA. The Thumb Pond has been the subject of a previous removal action and is anticipated to be fully accessible with rubber tired heavy equipment.

#### D. DEMOLITION AND SALVAGE (NOT USED)

#### E. INSTALL COVER MATERIAL SECTION:

Excavate VLT materials from identified borrow sources and place at the respective project sites to Specifications shown on the Plan sheets. The plans and specifications identify dust covers for the SAA and Thumb Pond.

#### F. FINAL SITE GRADING AND CLEAN UP:

Final site grading will include constructing final access roads to maintainable grades and drainages in the North and South VLT borrow areas. Install final BMP's on the borrow source areas to stabilize excavated areas. Re-establish any temporarily removed BMP

infrastructure along the existing maintenance roads. Carry out site clean up per Plan requirements.

## 5.0 OTHER LIMITATIONS

In addition to the limitations defined above and those elsewhere in the Contract Documents, the following limitations shall apply to construction activities:

### A. EXCAVATION:

ARC requires completion of a Ground Disturbance Permit (GDP) prior to initiating any excavation activities unless exempted by site Standard Operating Procedure (SOP) or Management of Change (MOC). The existing maintenance roads are exempt under a Site-wide SOP, while the north and south VLT borrow sources and berms for the South VLT haul road are anticipated to be cleared by an MOC for excavation activities. The Contractor will be responsible for identifying location and scheduling of all excavation activities outside of these areas under the requirements of excavation specific GDP's. The GDP generally requires for excavation notification of Underground Service Alert (USA), physical search and location by qualified location service or individual, hand augering exploration of the excavation perimeter, detailed plan of operation and job safety analyses. The GDP will describe the limits of operation, exclusion requirements and safety measures to be implemented during execution of the excavation work.

### B. UNDERGROUND FACILITIES:

ARC has indicated the approximate locations of known infrastructure on the Plans and Specifications based on the on-site operation and maintenance experience gained over the past several years. This does not preclude the existence of other underground utilities or unknown infrastructure that was installed or altered during mining activity subsequent to Anaconda mining operations.

Contractor shall protect all existing roads, vegetation, and other improvements that are not designated for removal, from damage by his operations. Any such features that are damaged or temporarily relocated by Contractor during construction shall be repaired or restored by Contractor to a condition equal to or better than they were prior to such damage or temporary relocation all in accordance with requirements of the Contract Documents and at no expense to ARC.

No additional compensation shall be provided Contractor for compliance with the provisions of this section or for the damage and repair of facilities due to the lack of such care.

### C. ROADWAY SPEED LIMITS AND ACCESS:

Contractor is responsible for complying with site access restrictions to the project work sites. This includes locking all gates, reporting breaches in security systems and ensuring its subcontractors follow required site protocols reviewed in the site orientation meeting. The Contractor shall obey the site-wide speed limit of 25 miles per hour (mph) at all times consistent

with the site HSSE manual. The plan sheets provided additional speed restrictions for haul roads with respect to grade and curves.

**\*\*END OF SECTION\*\***

## SECTION 01025

### MEASUREMENT AND PAYMENT

#### 1.0 MEASUREMENT AND PAYMENT

##### 1.1. General

Measurements of the completed work shall be in accordance with, and by instruments and devices calibrated to United States Standard Measures and the units of measurement for payment, and the limits thereof, shall be made as shown on the Plans, Specifications, General Requirements, and Supplementary Conditions.

##### 1.2 Units of Measurement

Measurements shall be in accordance with U.S. Standard Measures. A pound is an avoirdupois pound. A ton is 2,000 pounds avoirdupois. The unit of liquid measure is the U.S. gallon. A square foot or SF is equivalent to area that is 144 square inches. An acre is equivalent to an area of 43,560 square feet. A bank cubic yard or BCY is equivalent to an in-place volume of 27 cubic feet of material.

##### 1.3 Certified Weights

When payment is to be made on the basis of weight, the weighing shall be done on certified platform scales, or when approved by the Engineer, on a completely automated weighing and recording system. Contractor shall furnish the Engineer with duplicate licensed weigh master's certificates showing the actual net weights. Owner will accept the certificates as evidence of the weights delivered.

##### 1.4 Methods of Measurement

Materials and items of work, which are to be paid for on the basis of measurement, shall be measured in accordance with the method stipulated in the particular sections involved. In determining quantities, all measurements shall be made in a horizontal plane unless otherwise specified.

Material not used from a transporting vehicle shall be determined by the Engineer and deducted from the certified tag.

When material is to be measured and paid for on a volume basis and it would be impractical to determine the volume, or when requested by the Contractor in writing and approved by the Engineer in writing, the material will be weighed and converted to volume measurement for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the Engineer and shall be agreed to by the Contractor before such method of measurement of pay quantities will be adopted.

Full compensation for all expense involved in conforming to the above requirements for measuring and weighing materials shall be considered as included in the unit prices paid for the materials being measured or weighed and no additional allowances will be made therefore.

Quantities of material wasted or disposed of in a manner not called for under the Contract; or rejected loads of material, including material rejected after it has been placed by reason of failure of the Contractor to conform to the provisions of the Contract; or material not unloaded from the transporting vehicle; or material placed outside the lines indicated on the plans or given by the Engineer; or material remaining on hand after completion of the Contract, will not be paid for and such quantities will be deducted from the final total quantities. No compensation will be allowed for hauling rejected material.

Payment for the various items of the Bid Schedule, as further specified herein, shall include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidentals appurtenant to the items of work being described, as necessary to complete the various items of the Work all in accordance with the requirements of the Contract Documents, including all appurtenances thereto, and including all costs of permits and cost of compliance with the regulations of public agencies having jurisdiction, including Safety and Health Requirements of the Nevada Division of Industrial Safety and the Occupational Safety and Health Administration (OSHA) of the U.S. Department of Labor. Separate payment will not be made for any item that is not specifically set forth in the Bid Schedule, and all costs therefore shall be included in the prices named in the Bid Schedule for the various appurtenant items of work.

#### 1.5 Lump Sum Items

Except where specified otherwise, payment for lump sum items shall be made for the completed work on a percentage basis of each with the full amount to be paid to the Contractor upon completion of the work as specified and shown.

#### 1.6 Unit Price Items

Payment for unit price items shall be as determined from the ARC inspector's records of the quantities of work completed each month times the unit price established in the bid sheets.

Measurement and payment of pipeline quantities shall be by survey quantity as described in the Supplemental Conditions. The Surveyed Control is based on the Stationing as shown on the Plans and does not provide for labor and material slope or waste factors. The Contractor shall include all labor and materials for slope and waste factors as appropriate to complete the work. This shall include all materials and labor necessary to include an increase of up to 25 percent of unit quantities per 20,000 bank cubic yards of placement. Quantities over 25 percent shall be addressed as a change order per Contract Documents.

## 1.7 Time and Material Items

Except where specified otherwise, payment for time and materials for professional services is as listed in the Bid Schedule. Services will be paid based on receipt provided by professional for project authorized services defined within the Contract Documents as listed on the Bid Schedule. Contractor is limited to mark up of no more than 10 percent over the invoice receipt.

## 2.0 BID ITEMS

Contractor shall provide one Bid Schedule. The Bid Amounts for each Bid Item will be used for comparative bid analysis. The Bid amounts will also form the basis of monthly progress payments. Each Lump Sum bid amount will undergo further breakdown as described later in this section. Contractor shall comply with the Nevada Labor Code relating to the price for the Bid Items, including sheeting, shoring, and bracing of excavation. Bid items are not intended to be exclusive descriptions of work categories and the Contractor shall determine and include in its pricing all materials, labor, and equipment necessary to complete each bid item (work phase) as shown and specified.

### BID ITEM 1: MOBILIZATION (LUMP SUM)

- A. **MEASUREMENT:** Complete preparatory work including all site HSSE personnel training, construction water systems, traffic control, survey offsets, signage and exclusion zones. The lump sum price for mobilization shall include all costs for obtaining all bonds, permits, and licenses; moving onto and off of the site of all plants and equipment; furnishing and erecting plants, construction trailers, and other construction facilities; and all preparatory work as required for the proper performance and completion of the project, including work items not identified in a separate bid item.
- B. **PAYMENT:** Payment for mobilization will be made at the lump sum price named. This price shall constitute full payment for mobilization, complete as specified. The Total Price for mobilization shall not exceed 10 percent of the sub-total of Bid Items 2 through 8.

### BID ITEM 2: NORTH VAT LEACH TABLE (VLT) HAUL ROAD (SQUARE FOOT).

- A. **MEASUREMENT:** Complete preparation of North VLT Haul road access network including preparation of existing and new roads required for facilitating fill operations to the Thumb Pond as shown on the Plans.

- B. **PAYMENT:** Payment for the access roads for the North VLT access circuit shall be paid by square footage along Plan access alignments. Payment shall be made for completed road section, tested and in place per Plan sheets. Road surface is defined as the compacted travel way. Work shall include all labor materials and peripheral support for equipment, labor, materials and appurtenant devices necessary to complete the structure for its intended purpose. Payment will be made on square footage up to the Plan design width only.

**BID ITEM 3: THUMB POND INTERIM DUST COVER (BANK CUBIC YARD)**

- A. **MEASUREMENT:** Excavate, transport, dump and spread VLT tailings per Plan and Specifications on Thumb Pond to complete contoured dust mitigation cover.
- B. **PAYMENT:** Payment for installing the dust mitigation cover shall be paid by placement of material in bank cubic yards to the elevation specified in the Plan sheets to the density specified. Measurement shall be completed by survey to determine the elevation over relative grid points provided in the base survey. Density testing must be completed prior or concurrently with survey. Payment will be for volume determined by Engineer's Autodesk Civil 3D software comparison of the design surface relative to the existing surface as a percentage of the total fill volume. A completed unit of volume will require three adjacent grid points to attain design elevation to constitute a payment quantity. Areas failing to attain the elevation at the specified density will not qualify for payment or partial payment. The failing area will require resurvey upon rework of the area for payment in the following pay period. Work shall include all labor materials, equipment and appurtenant labor and materials necessary to complete the work as shown on the Plan sheets. Fill above the design elevation will not be considered for payment.

**BID ITEM 4: SOUTH VLT HAUL ROAD NETWORK (SQUARE FOOT).**

- A. **MEASUREMENT:** Complete preparation of South VLT Haul road access network including preparation of existing and new roads required for facilitating fill operations to the SAA LEP shown on the Plans
- B. **PAYMENT:** Payment for the access roads for the South VLT access circuit shall be paid by square footage along Plan access alignments. Payment shall be made for completed road section, tested and in place per Plan sheets. Road surface is defined as the compacted travel way. Work shall include all labor materials and peripheral support for equipment, labor, materials and appurtenant devices necessary to complete the structure for its intended purpose. Payment will be made on square footage up to the Plan design width only.

**BID ITEM 5: SUB AREA A (SAA) INTERIM DUST COVER (BANK CUBIC YARD)**

- A. **MEASUREMENT:** Excavate, transport, dump and spread VLT tailings per Plan and Specifications on Sub Area A to complete non-contoured dust mitigation cover.
- B. **PAYMENT:** Payment for installing the dust mitigation cover shall be paid by placement of material in bank cubic yards to the elevation specified in the Plan sheets to the density specified. Measurement shall be completed by survey to determine the elevation over relative grid points provided in the base survey. Density testing must be completed prior or concurrently with survey. Payment will be for volume determined by Engineer's Autodesk Civil 3D software comparison of the design surface relative to the existing surface as a percentage of the total fill volume. A completed unit of volume will require three adjacent grid points to attain design elevation to constitute a payment quantity. Areas failing to attain the elevation at the specified density will not qualify for payment or partial payment. The failing area will require resurvey upon rework of the area for payment in the following pay period. Work shall include all labor materials, equipment and appurtenant labor and materials (including geo-grid) necessary to complete the work as shown on the Plan sheets. Fill above the design elevation will not be considered for payment.

**BID ITEM 6: FINAL CLEAN UP (LUMP SUM)**

- A. **MEASUREMENT:** Complete final clean up including establishing BMP's for borrow source areas and remaining haul roads, provide all construction reports documenting placement of all cover materials.
- B. **PAYMENT:** Payment based on installation of BMP's and storm water management controls in excavated areas, removal of temporary traffic control devices and all equipment and materials required for direct or indirect support of the Project Work. Provide all lien releases, record drawings and completion reports.

**BID ITEM 7: FORCE ACCOUNT ALLOWANCE FOR ROAD AND MISCELLANEOUS REPAIRS (LUMP SUM)**

- A. **MEASUREMENT:** Road repair or widening, temporary or incidental repairs carried out on a force-account basis shall be as directed by Project Authority only through written authorization for each assignment, when installed, based on completed work measured by the Engineer. Measurement for payment does not signify that repairs are accepted.
- B. **PAYMENT:** Provision and installation of road or BMP repairs complete as agreed to by Project Authority and Contractor per assignment, including but not limited to special fabrications, all site clearing, existing improvements



protection, excavation, removal and disposal of unsuitable materials, surface restoration, drainage, etc., cleanup, and all labor, equipment, materials and incidentals required for the work.

### 3.0 CONTRACTOR'S LUMP SUM COST BREAKDOWN

For work to be performed for a lump sum amount, the Contractor shall submit a cost breakdown to the Engineer prior to the first payment and within ten (10) days after Notice to Proceed. The cost breakdown, as agreed upon by the Contractor and the Engineer, shall be used for preparing future estimates for partial payments to the Contractor, and shall list the major items of work with a price fairly apportioned to each item.

The cost breakdown shall be generally in the same format as the Contract Bid Form, with major items of work listed individually. The cost breakdown shall be by logical division of work. The cost breakdown shall include separate allowances for any testing and start-up work required. Measurable approximate quantities of work performed by the Contractor or its subcontractors shall be provided. For quantities that are the sum total of several individual quantities, backup summaries shall be provided which list the individual descriptions and quantities. These summaries then will be used to determine the quantities of work in place in subsequent progress payment requests.

The above is a statement of the intent of the Contract Documents to provide a moderate level of detail, acceptable to the Engineer, to allow a fair and reasonable estimate to be made of the value of work installed. The detail of the cost breakdown must be sufficient to provide timely processing of the monthly progress payment request.

The cost breakdown will be subject to the approval of the Engineer, and upon request, the Contractor shall substantiate the price for any or all items and provide additional level of detail, including quantities of work. The cost breakdown shall be sufficiently detailed to permit its use by the Engineer as one of the bases for evaluating requests for payments. Engineer shall be the sole judge of the adequacy of the cost breakdown.

The cost breakdown shall be solely used to help determine progress payments. The cost breakdown shall not be considered in determining payment or credit for additional or deleted work.

\*\*\* END OF SECTION \*\*\*

## SECTION 01050

### SURVEYING

#### 1.0 INTENT

It is the intent of these specifications to provide the Contractor with adequate information to conduct such surveying as is necessary to execute the project as indicated on the drawings. The drawings indicate the intent of the removal action placement. In all questions arising to proper location of lines and structures the Engineer's decision will be final. All survey information for the Project Design was provided by Tri State Surveying, 425 E. Long Street, Carson City, Nevada 89706.

The project survey control was initially established by Lumos Engineering, Carson City, Nevada. The coordinate basis is Nevada State Plane, West Zone using the 1927 North American Datum (NAD 27) in grid coordinates. The vertical elevations are relative to the 1929 North Geodetic Vertical Datum (NGVD 29). The basis of elevation is established on National Geodetic Survey Monuments E320 (4417.05 feet) and E321 (4332.69 feet). The survey information meets the minimum requirements for a Third Order Class I survey with an accuracy of 1 part in 10,000.

The Plans and Specifications describe the cover material thicknesses to be achieved by the Contractor. Placement of material to attain the required thickness will be determined by survey only. Base grid surveys of the respective fill areas were completed on 100 foot grids for installing the dust mitigation covers. The grid survey will be used to verify material placement and thickness throughout execution of the project. Areas within the Lined Evaporation Pond (LEP) which state a flat elevation will use the stated interpolated elevation as the basis of elevation unless the Contractor can provide additional survey information tied into the control network within the required tolerance prior to initiating any fill work on the LEP.

The results of the grid surveys will be provided in the removal action report. Volumes provided in the plan sheets are for bid tabulation and are anticipated to be within a 25 percent range. Quantities beyond those estimates and above the 25 percent volume, if any, will be addressed as a change order.

#### 2.0 SURVEY CONTROL

Survey control is provided in the drawings, which includes seven monuments which may be used for staking of the proposed removal action components. Contractor shall submit a positive confirmation check of all monuments used for staking. At the start of the project, ARC will provide one north-south and east-west base line from CP 504 using the NAD 27 coordinate system and NGVD-29 elevation datum – 4364.46 feet. The Contractor shall be responsible for all subsequent surveying work necessary for completing the project work which includes but is not limited to road construction, cover installation control, construction reference staking and re-establishment of monuments. For payment requests ARC will provide the initial payment

contract survey to determine quantity placed in the anticipated completed area. The Contractor is responsible for requesting this survey 8 work days prior to each pay period close and responsible for all resurvey on areas determined to be deficient. The Contractor shall utilize the same survey firm for all resurveys of contract payment quantity work. These surveys will be used as the basis of determining pay quantity and included in the final construction report.

### 3.0 TOLERANCES

The horizontal position of facility shall be located to within 0.10 feet of the offsets as shown on the plan sheets. Vertical positions shall be located to within 0.02 feet of the specified elevations. Any modifications to this specification shall be approved by the Engineer prior to continuation of that part of the work to which the modification applies.

### 4.0 FACILITY CONSTRUCTION

The drawings indicate the intended position of the proposed improvements. If Contractor survey layout of the proposed removal actions reveal field conditions significantly different from those illustrated on the drawings, the Engineer shall be notified prior to continuing with the work to which the surveying applies.

### 5.0 CONSTRUCTED FACILITY SURVEY

ARC will maintain the library of the contract pay surveys which will become the basis for assembling the record drawings for the removal action report. This library will be available in an electronic format for Contractor to be made aware of construction progress including any deficiencies for attaining the required elevations and thicknesses based on surface interpolations of the surveyed grid points by Engineer's AutoCAD Civil 3D software.

The library shall contain an electronic point file in a PNEZD format which includes point local northing, local easting, NGVD-29 elevation and description. The first point shall be one of the control monument provided on the plan sheets. The following descriptions shall be applied:

Descriptor	For
fpg-xx/xx	finished grid grade – month/day (survey date)
arc-xx/xx	Access Road Crest– month day (Shoulder – Month Date)
art-xx/xx	Access Road Toe – month/day
CM-xx/xx	Control Monument – month/day
pbt-xx/xx	Pond berm termination month/day (Termination of cover into existing perimeter berm)

**\*\*END OF SECTION\*\***

## SECTION 01060

### SAFETY AND HEALTH

#### 1.0 GENERAL

Selected Contractor shall be able to demonstrate that they are experienced and competent to carry out the required work in accordance with applicable legislation, regulations and accepted safety standards. The Contractor shall take measures to assure their personnel observe project specific safety requirements as identified in the Yerington Site Health and Safety Plan (HASP).

#### 1.01 CONTRACTOR SAFETY PRE-QUALIFICATION

The Contractor Pre-Qualification Form (attached) must be completed and submitted to Engineer with the bid proposal stating the contractor's safety history and current safety program. Any subcontractors employed by the selected Contractor shall be required to submit the same Contractor Pre-Qualification Form and must be approved by Engineer prior to conducting work at the Site.

#### 1.02 CONTRACTOR HEALTH SAFETY SECURITY AND ENVIRONMENTAL (HSSE) MANUAL

Contractor shall submit a proposed HSSE Manual for Project Manager's files. The Project Engineer will not review but will compare the manual to existing site Health and Safety plans. The Contractor will be responsible for implementing the manual and adapting the manual to site conditions and construction techniques that will provide a safe working environment for executing the project work. The Contractor shall have this manual in place and provide training time to all Contractor employees, subcontractors or vendors that will require access to the mine site.

#### 1.03 PROTOCOL:

At the start of each work day, all Contractor employees shall report to the main field office to sign in, and shall report back at close of the work day or when leaving the site for sign out. Contractor's employees may not sign in and out for other personnel.

The work day shall be from 8:00 AM to 4:00 PM local time Monday thru Friday unless specifically adjusted mutually by Contractor and Engineer site personnel.

#### 1.04 SAFETY:

The Contractor shall be required to meet the following minimum safety requirements before conducting work at the site:

1. Contractor workers shall provide copies of training certifications to Engineer's Project Safety Manager prior to mobilization to the site, including: 1) OSHA 40 hour HAZWOPER and current 8 hour refresher (all site workers), 2) OSHA 10 hour Construction Training (general workers) and OSHA 30 hour Construction Supervisor (on-site supervisor), 3) mobile equipment training certificates, and 4) any other relevant training records (e.g. first aid/CPR, driver safety).
2. Minimum PPE required for all work at the site includes: hard hat, safety glasses, hard-toe boots, high-visibility vest, and long-sleeve shirt. Additional PPE may be required for specific work tasks.
3. Contractor shall provide or participate in a site specific job hazard assessment using the provided Task Safety and Environmental Analysis (TSEA) form. All work tasks must be hazard assessed prior to start of work. (Attachment 1)
4. All hazardous work activities shall be reviewed and approved using a work permit system including ground disturbance, working at heights, and energy isolation (lockout/tagout). The contractor shall be responsible for reviewing and signing permits daily.
5. Contractor workers shall participate in site safety training and daily safety activities including: 1) Pre-entry site briefing video presentation, 2) Pre-job kick-off safety meeting and hazard assessment, 3) Daily morning "toolbox meetings" and 4) read and understand the Site Health and Safety Plan (HASP).

## 2.0 SAFETY AND HEALTH REGULATIONS

The Contractor shall comply with Safety and Health Regulations for Construction, promulgated by the Secretary of Labor under Section 107 of the Contract Work Hours and Safety Standards Act, as set forth in Title 29, C.F.R. Copies of these regulations may be obtained from Labor Building, 14th and Constitution Avenue N.W., Washington, DC 20013.

The Contractor shall also comply with the provisions of the Federal Occupational Safety and Health Act, as amended, and related or similar Nevada statutes and regulations.

Company Information	
Legal Company Name:	Industry Classification Code(s) [NAICS or SIC]:
Company Address:	
HSSE Contact Person:	Phone No(s): Fax Number: E-mail:

Insurance Details		
Insurance	Currently Have	
	Yes	No
Commercial General Liability	<input type="checkbox"/>	<input type="checkbox"/>
Automobile Liability	<input type="checkbox"/>	<input type="checkbox"/>
Professional Liability	<input type="checkbox"/>	<input type="checkbox"/>
Worker's Compensation	<input type="checkbox"/>	<input type="checkbox"/>
Contractor's Pollution Liability	<input type="checkbox"/>	<input type="checkbox"/>

Safety Statistics					
(A) Reporting year	2008	2007	2006	2005	2004
(B) Average Number of Employees					
(C) Total annual man hours worked for this reporting entity					
(D) Number of Recordable Cases					
(E) Incident Rate of Recordable Cases					
(F) Number of Days-Away-From-Work Cases					
(G) Incident Rate of Days-Away-From-Work Cases					
(H) Number of Days Away from Work					
(I) Worker's Compensation Experience Modification Rate (EMR)					
(J) Number of Fatalities					
Please provide comments and or clarification on the above data if appropriate:					

## **Instructions**

(A) **YEAR**: As shown.

(B) **Average # of Employees**: List the average # of employees who worked during the year. An employee shall be defined as any person engaged in activities for an employer from whom direct payment for services is received. Include working owners and officers.

(C) **Employee Hours**: List the total number of hours worked during the year by all employees, including those in operating, production, maintenance, transportation, clerical, administrative, sales and all other activities.

(D) **Number of Recordable Cases**: List the total number of Recordable cases that occurred in that year. Recordable Cases include: Fatalities, Days Away From Work Cases, Restricted Work Cases and Medical Treatment cases as defined by OSHA Part 1904 Recording and Reporting Occupational Injuries and Illnesses: [http://www.osha-slc.gov/recordkeeping/1904\\_record\\_report.pdf](http://www.osha-slc.gov/recordkeeping/1904_record_report.pdf)

(E) **Incidence Rate of Recordable Cases**: 
$$\frac{\text{Number of Recordable Cases} \times 200,000}{\text{Employee Hours}}$$

(F) **Number of Days-Away-From-Work Cases**: List the total number of Days-Away-From-Work cases that occurred during the year. A Days-Away-From-Work case will be defined as any Recordable Case that results in death or lost workdays with days away from work.

For the purpose of this questionnaire, Recordable cases that result in days with restricted activity should not be added in this column. Only Recordable cases that result in one or more days away from work should be counted.

(G) **Incidence rate of Days-Away-From-Work cases**: 
$$\frac{\text{No. of Days-Away-From-Work cases} \times 200,000}{\text{Employee hours}}$$

(H) **Number of Days Away from work**:

List the total number of Days-Away-From-Work experienced by all employees during the year. For the purposes of this questionnaire, lost workdays with restricted activity should not be added in this column. Only Recordable cases that result in one or more days away from work should be counted.

(I) **Worker's Compensation Experience Modification Rate (EMR)**: Provided by your insurance carrier.

(J) **Number of Fatalities**: List the total number of fatalities that result from occupational injuries or illnesses. Deaths that occur in the workplace but are not the result of occupational injuries or illness should not be included.

**\*\*END OF SECTION\*\***

## SECTION 01090

### REFERENCES

#### 1.0 CODES AND STANDARDS

Whenever reference is made to a code or standard, it means the latest edition in effect the date that the Contract Documents are dated. Where codes, standards and reference documents are referred to in the Contract Documents, the Contractor may submit a written request to the Engineer for assistance in locating such documents. Within three days of receipt of such request, the Engineer will notify the Contractor as to where the document(s) can be reviewed.

No provision of any such standard, specifications, manual, code or instruction shall be effective to change the duties and responsibilities of the Project Authority, Contractor, or Engineer, or any of their consultants, representatives, agents, or employees from those set forth in the Contract Documents. Nor shall any of the aforementioned be effective to assign to the Project Authority, or the Engineer, or any of their consultants, representatives, agents, or employees any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

#### 2.0 DEFINITIONS OF WORDS AND TERMS

Where used in the project manual, the following words and terms shall have the meanings indicated. The meanings shall be applicable to the singular, plural, masculine and feminine of the words and terms.

Acceptance. Formal action of the Project Authority in determining that the Contractor's work has been completed in accordance with the contract and in notifying the contractor in writing of the acceptability of the work.

Acts of God. "Acts of God" shall include only the following occurrences or conditions and effects: earthquakes in excess of a magnitude of 3.5 on the Richter Scale and tidal waves.

Addenda. Supplemental written specifications or drawings issued prior to bid submittal which modify or interpret the project manual by addition, deletion, clarification, or corrections.

Agreement. The written document covering the performance of the Work as more fully described in the Contract Documents.

AOC/SOW 2009. Administrative Order on Consent (CERCLA Docket 09-2009-0010)/ Scope of Work – executed agreement between EPA and Atlantic Richfield Company (ARC) to execute removal action at the Yerington Mine Site. The SOW provides the scope of work upon which the project is based. ARC will implement the SOW project work as the Project Authority under the supervision of the Owners Representative, EPA.



ASTM. The standards of the American Society for Testing and Materials (ASTM International).

Bid. Offer of a bidder submitted on the prescribed form setting forth prices of the work to be performed.

Bidder. Individual, partnership, corporation, or a combination thereof, including joint venturers offering a bid to perform the work.

CERCLA. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), a United States federal law designed to clean up abandoned hazardous waste sites. This project work is authorized under CERCLA as a site Removal action of Anaconda related facilities, which is a short-term response actions to address potential threatened releases of on-site tailings materials.

Clarification Letter. A Clarification Letter is issued by the Engineer to address the clarification of Contract issues raised by the Engineer, or Project Authority.

Completion. The word completion shall indicate substantial completion.

Engineer. The person designated, in writing, by the Project Authority to act as its representative at the construction site and to perform construction inspection services and administrative functions relating to this Contract. Initial contact by the Contractor with the Project Authority shall be through the Engineer.

Contract Change Order. A written order to the Contractor, covering changes in the plans or quantities, or both, and establishing the basis of payment and time adjustments for the work affected by the changes. Also referred to as a Change Order.

Contract Documents. Documents listed in Atlantic Richfield's Remedial Management Master Services Agreement' (RMMSA) and amended by ARC in the procurement agreement with the Contractor.

Contract Price (also referred to as Contract Amount). The amount payable to the Contractor under the terms and conditions of the contract based on the price given on the bidding schedule, with adjustments made in accordance with the Contract. The base amount given in the bidding schedule shall be either a lump sum bid or the summation of the unit price bids multiplied by the estimated quantities set forth in the bid form.

Contract Time. Number of calendar days stated in the contract for the completion of the work.

Contractor. The individual partnership, corporation, or combination thereof including joint venturers who enter into the contract with the Project Authority for the performance of the work. The term covers subcontractors, subtier subcontractors, consultants, equipment and material suppliers, and their employees.

Contractor's Plant and Equipment. Equipment, material, supplies, and all other items, except labor,

brought onto the site by the Contractor to carry out the work, but not to be incorporated in the work.

Corrective Work Item List. List of incomplete items of work, incomplete administrative requirements and items of work which are not in conformance with the Contract, prepared by the Engineer and issued to the Contractor as an attachment to the response to the Contractor's notification of Substantial Completion.

Days. The word "Days" shall mean calendar days, including legal holidays, Saturdays and Sundays, unless specifically noted otherwise.

Direct. Action of the Project Authority or Engineer by which the Contractor is ordered to perform or refrain from performing work under the Contract.

Drawings. Also referred to as "Plans". That part of the Contract Documents consisting of the graphical and technical requirements of the Contract as included on the plan sheets.

Engineer. The Engineer is designated by the Project Authority in the Contract Documents to have design control over the Work or a specified portion of the Work, acting either directly or through duly authorized representatives. Such representatives shall act within the scope of the particular duties delegated to them. The Engineer may also furnish inspection services as provided by the Contract Documents.

Field Directive. Written documentation of the actions of the Project Authority or Engineer in directing the Contractor. Also referred to as a Directive.

Field Order. A written instruction given to the Contractor authorizing work that is a change to the scope of work carried out on a time and material basis.

Final Inspection List. List of materials, equipment, workmanship, or administrative requirements which are not in conformance with the Contract. The list shall be prepared by the Engineer and submitted to the Contractor following the Contractor's notice of completion of the Work, including all items on the Punch List.

Float. Float or "total float" shall be defined as provided in the Associated General Contractors of America "CPM in Construction, A Manual for General Contractors".

Fluid. Low pH aqueous liquids present on or in mine site process components including heap leach pads, tailings ponds and evaporation ponds.

Furnish. To deliver to the job site or other specified location any item, equipment or material.

General Conditions. Sections 00700, GENERAL CONDITIONS, and 00800, SUPPLEMENTARY CONDITIONS, which form the part of the Contract Documents representing the general clauses that establish how the project is to be administered.

General Requirements. Division 1, GENERAL REQUIREMENTS, which forms the part of the

Contract Documents establishing special conditions or requirements peculiar to the work and supplementary to the General Conditions.

Hazwoper and Hazwoper Training. Clean-up operations required by a governmental body, whether Federal, state local or other involving hazardous substances that are conducted at uncontrolled hazardous waste sites, state priority site lists and initial investigations of government identified sites which are conducted before the presence or absence of hazardous substances has been ascertained. All Contractor personnel shall be trained, certified and current with Hazwoper training meeting the requirements of OSHA 29 CFR 1910.120.

Herein. Refers to information presented in the project manual.

Holidays. Legal holidays shall include the following holidays as listed in the Standard Specifications for Public Works Construction, latest edition.

Install. Placing, erecting, or constructing complete in place any item, equipment, or material.

Low pH. Fluid which tested by EPA accepted methods results in a pH value less than or equal to 5.5 standard units (s.u.).

Notice to Proceed. Notice to Proceed shall mean the written notice issued by Project Authority to Contractor authorizing him to proceed with the work and establishing the date of commencement of the Contract Time. Notice to Proceed may or may not include separate dates establishing the date of commencement of the submittal process.

Orange Book. See Standard Specifications for Public Works Construction.

Owner. The word Owner refers to the bankruptcy court for Arimetco. EPA is the designated authority acting on the Owner's behalf under CERCLA.

Owner Representative. As stated under Owner, EPA is the designated Owner's representative acting under CERCLA authority. Under CERCLA authority EPA is the permitting agency for all proposed site work.

Paragraph. For reference or citation purposes, a paragraph shall refer to the paragraph, or paragraphs, called out by paragraph number and alphanumeric designator.

Person. The term, person, includes firms, companies, corporations, partnerships, and joint ventures.

pH The arithmetic logarithm of one (1) divided by the molar concentration of hydrogen ions in a solution, on a scale of 0 through 14. Fluids with pH less than 5.5 s.u. are considered to be acidic and those with a pH value greater than 8.5 s.u. are considered to be alkaline.

Plans. See "Drawings".

Precedence. Order of precedence for conflicting specifications within the documents shall be 1) plan sets, 2) Part A & B – Specifications 3) Standard Specifications for Public Works Construction (Orange Book).

Product Data. The catalog cuts or manufacturer's literature submitted to the Engineer in accordance with the Project Manual.

Project. The undertaking to be performed under the provisions of the contract.

Project Authority. Under the AOC/SOW Atlantic Richfield (ARC) has entered into agreement to facilitate the project work outlined in the Contract Documents. ARC does not own any property at the abandoned mine site and for Contract purposes is executing the work as specifically defined in the AOC/SOW 2009. As the Project Authority ARC will direct the project to fulfill the obligation of the AOC/SOW only and be final authority for payment and acceptance of all project related work.

Project Engineer. The Project Engineer works as a duly authorized representative under the Engineer to assist with design over specified portions of the Work. The Project Engineer shall act within the scope of the particular duties delegated to him by the Engineer. The Project Engineer may also assist with furnishing inspection services as authorized by the Engineer.

Project Manual. The bound documentary information prepared for bidding and constructing the work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the Table of Contents.

Provide. Furnish and install, complete in place.

Punch List. List of incomplete items of work, incomplete administrative requirements and items of work which are not in conformance with the Contract, prepared by the Engineer and issued to the Contractor as an attachment to the Certificate of Substantial Completion.

Request for Information. Also referred to as “Request for Clarification”. A Request for Information (RFI) is issued by the Contractor to the Engineer to request resolution of a question on a Contract issue. A RFI is not to be used for request for material/equipment substitutions or value engineering/cost reduction incentive proposals.

Shall. See definition of "will".

Shown. Refers to information presented on the drawings, with or without reference to the drawings.

Specifications. That part of the Contract Documents consisting of written descriptions of the technical features of materials, equipment, constructions systems, standards, and workmanship.

Specify. Refers to information described, shown, noted or presented in any manner in any part of

the contract.

Standard Specifications for Public Works Construction. Standard Specifications as distributed and endorsed by Regional Transportation Commission (RTC) of Washoe County, Washoe County, City of Sparks, City of Reno, Carson City and City of Yerington in effect at the time of advertising the Work. These specifications are incorporated by reference and placed in hierarchal precedence as defined under precedence. Also referenced as the 'Orange Book.'

Subcontractor. A subcontractor is a person or entity who has a direct contract with the Contractor or a subtier subcontractor who has a direct contract with a subcontractor to perform any of the Work associated with the Project. The term subcontractor means a subcontractor or subcontractor's authorized representative. The term subcontractor, does not include any separate contractor or any separate contractor's subcontractors.

Submittals. The information which is specified for submission to the Engineer in accordance with the project manual.

Substantial Completion. Sufficient completion of the project or the portion thereof to permit utilization of the project, or portion only that the work is sufficiently completed to permit utilization, and for which the Owner or Project Authority can effectively utilize the substantially completed work. Determination of substantial completion is solely at the discretion of the Project

Authority. Substantial completion does not mean complete in accordance with the Contract nor shall substantial completion of all or any part of the project entitle the Contractor to acceptance under the Contract.

Substantial Completion Date. Date when the Project Authority puts into service, the project, or that portion of the project that has been determined to be substantially complete.

Sub-subcontractor. A sub-subcontractor is a person or entity who has a direct or indirect contract with a subcontractor to perform any of the Work at the Site. The term sub-subcontractor means a sub-subcontractor or an authorized representative thereof, also referred to as subtier-subcontractor.

Supplier. Any person, firm, corporation, or organization who supplies materials or equipment for the Work, including that fabricated to a special design, and may also be a Subcontractor or a Subcontractor.

Surety. The person, firm, corporation, or organization that joins with the Contractor in assuming the liability for the faithful performance of the Work and for the payment of all obligations pertaining to the Work in accordance with the Contract Documents by issuing the Bonds required by the Contract Documents or by law.

Will. Refers to actions entered into by the Contractor or the Project Authority as a covenant with the other party to do or to perform the action.

Work. The labor, materials, equipment, supplies, services, and other items necessary for the

execution, completion and fulfillment of the Contract.

Work Day. Any day except Saturday, Sunday, and legal holidays. For time extension purposes a work day is equivalent to 1.45 calendar days.

### 3.0 ABBREVIATIONS

Whenever the following terms are used, the intent and meaning shall be as follows:

#### Abbreviation Stands For

AASHTO	American Association of State and Highway and Transportation Officials
AAMA	Architectural Aluminum Manufacturers Association
ABMA	American Boiler Manufacturers Association
ACI	American Concrete Institute
ADC	Air Diffusion Council
AGA	American Gas Association
AGMA	American Gear Manufacturers Association
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AMCA	Air Moving and Conditioning Association
ANSI	American National Standard Institute (formerly United States of America Standards Institute)
APA	American Plywood Association
API	American Petroleum Institute
ARC	Atlantic Richfield Company
AREA	American Railway Engineers Association
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society of Testing and Materials
ATSSA	American Traffic Safety Service Association
AWPA	American Wood-Preserver's Association
AWS	American Welding Society
AWWA	American Water Works Association
CBM	Certified Ballast Manufacturers
CBR	California Bearing Ratio
CI	Chlorine Institute
CISPI	Cast Iron Soil Pipe Institute
CMAA	Crane Manufacturers Association of America
CPSC	Consumer Products Safety Commission
CRSI	Concrete Reinforcing Steel Institute
CTI	Cooling Tower Institute
DFPA	Douglas Fir Plywood Association

### Abbreviation Stands For - Continued

EIA	Electronic Industries Association
EPA	U.S. Environmental Protection Agency
ETL	Electronic Testing Laboratory
FM	Factory Mutual Insurance Company
FPS	Fluid Power Society
FS	Federal Specifications
HI	Hydraulic Institute
HMI	Hoist Manufacturers Institute
IAPMO	International Association of Plumbing and Mechanical Officials
IBC	International Building Code
IBR	Institute of Boiler and Radiator Manufacturers
ICBO	International Conference of Building Officials
	IEEE Institute of Electrical and Electronic Engineers
IES	Illuminating Engineering Society
IFC	International Fire Code
IPCE	International Power Cable Engineers Association
IRC	International Residential Code
ISA	Instrument Society of America
MIL	Military Specifications
MSHA	Mine Safety and Health Administration
MSS	Manufacturer's Standardization Society
NAAMM	National Association of Architectural Metal Manufacturers
NBS	National Bureau of Standards
NDEP	Nevada Department of Environmental Protection
NEC	National Electric Code
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
NSF	National Sanitation Foundation
NWMA	National Woodwork Manufacturers Association
OSHA	Occupational Safety and Health Act
PCMAC	Prestressed Concrete Manufacturers Association of California
SMACNA	Sheet Metal and Air Conditioning Contractors National Association
SSPC	Structural Steel Painting Council TCA Tile Council of America
UBC	Uniform Building Code
UFC	Uniform Fire Code
UMC	Uniform Mechanical Code
UPC	Uniform Plumbing Code
UL	Underwriters Laboratories
WCLIB	West Coast Lumber Inspection Bureau

\*\*\* END OF SECTION \*\*\*

## SECTION 01200

### PROJECT MEETINGS

#### 1.0 PRE-CONSTRUCTION CONFERENCE

Prior to the start of construction ARC will conduct a pre-construction conference. At the conference ARC will review the Contractor's proposed schedule of operations and the construction procedure and sequence requirements. Impacted utility personnel (gas, electric, cable, etc.) should specifically have been contacted by the Contractor for any work, which will require coordination from these services during performance of Work. Also discussed will be the Contractor's field organization, submittals, progress payments, change order procedures, safety requirements, permits and inspections, and other matters.

#### 2.0 PROGRESS MEETINGS

The Engineer shall schedule, arrange and conduct progress meetings. These meetings shall be conducted not more than once per week and shall be attended by the Contractor's superintendent and representatives of all subcontractors, utilities, and others that are active in the execution of the Work. The purpose of these meetings shall be to review the Contractor's three-week schedule provided in accordance with Section 01310-7.0, WEEKLY ACTIVITIES PLAN, resolve conflicts, and in general, coordinate and expedite the execution of the Work.

The agenda of progress meetings shall include, at a minimum, review of progress and schedule, clarifications, changes, quality of work, progress payment request, and record documents. The Contractor shall prepare and distribute minutes to the meetings.

**\*\*END OF SECTION\*\***



## SECTION 01300

### SUBMITTALS

#### 1.0 GENERAL

Submittals covered by these requirements include manufacturers' information, shop drawings, test procedures, test results, samples, requests for substitutions, and miscellaneous work-related submittals. Submittals shall also include, but not be limited to, all mechanical, electrical and electronic equipment and systems, materials, reinforcing steel, fabricated items, and piping and conduit details. The Contractor shall furnish all drawings, specifications, descriptive data, certificates, samples, tests, methods, schedules, and manufacturer's installation and other instructions as specifically required in the Contract Documents to demonstrate fully that the materials and equipment to be furnished and the methods of work comply with the provisions and intent of the contract documents.

#### 2.0 CONTRACTOR'S RESPONSIBILITIES

The Contractor shall be responsible for the accuracy and completeness of the information contained in each submittal and shall assure that the material, equipment or method of work shall be as described in the submittal. The Contractor shall verify that all features of all products conform to the specified requirements. Submittal documents shall be clearly edited to indicate only those items, models, or series of equipment, which are being submitted for review. All extraneous materials shall be crossed out or otherwise obliterated. The Contractor shall ensure that there is no conflict with other submittals and notify the Engineer in each case where his submittal may affect the work of another contractor or the Project Authority. The Contractor shall coordinate submittals among his subcontractors and suppliers including those submittals complying with unit responsibility requirements specified applicable technical sections.

The Contractor shall coordinate submittals with the work so that work will not be delayed. Contractor shall coordinate and schedule different categories of submittals, so that one will not be delayed for lack of coordination with another. No extension of time will be allowed because of failure to properly schedule submittals. The Contractor shall not proceed with work related to a submittal until the submittal process is complete. This requires that submittals for review and comment shall be returned to the Contractor stamped "No Exceptions Taken" or "Make Corrections Noted."

The Contractor shall certify on each submittal document that he has reviewed the submittal, verified field conditions, and complied with the Contract Documents.

The Contractor may authorize in writing a material or equipment supplier to deal directly with the Engineer or with the Project Authority with regard to a submittal. These dealings shall be limited to contract interpretations to clarify and expedite the work.

### 3.0 CATEGORIES OF SUBMITTALS

#### A. GENERAL:

Submittals fall into two general categories; submittals for review and comment, and submittals which are primarily for information only. Submittals which are for information only are generally specified as PRODUCT DATA in Part 2 of applicable specification sections.

At the beginning of work, the Engineer will furnish the Contractor lists of those submittals specified in the Project Manual. Two separate lists will be provided: submittals for review and comment and product data (submittals) for information only.

#### B. SUBMITTALS FOR REVIEW AND COMMENT:

All submittals except where specified to be submitted as product data for information only shall be submitted by the Contractor to the Engineer for review and comment.

#### C. SUBMITTALS (PRODUCT DATA) FOR INFORMATION ONLY:

Where specified, the Contractor shall furnish submittals (product data) to the Engineer for Information only.

### 4.0 TRANSMITTAL PROCEDURE

#### A. GENERAL:

Unless otherwise specified, submittals regarding material and equipment shall be accompanied by Transmittal Form 01300-A specified in Section 01999. Submittals for operation and maintenance manuals, information and data shall be accompanied by Transmittal Form 01730-A specified in Section 01999. A separate form shall be used for each specific item, class of material, equipment, and items specified in separate, discrete sections, for which the submittal is required. Submittal documents common to more than one piece of equipment shall be identified with all the appropriate equipment numbers. Submittals for various items shall be made with a single form when the items taken together constitute a manufacturer's package or are so functionally related that expediency indicates checking or review of the group or package as a whole.

A unique number, sequentially assigned, shall be noted on the transmittal form accompanying each item submitted. Original submittal numbers shall have the following format: "XXX"; where "XXX" is the sequential number assigned by the Contractor. Resubmittals shall have the following format: "XXX-Y"; where "XXX" is the originally assigned submittal number and "Y" is a sequential letter assigned for resubmittals, i.e., A, B, or C being the 1st, 2nd, and 3rd resubmittals, respectively. Submittal 25B, for example, is the second resubmittal of submittal 25.

B. DEVIATION FROM CONTRACT:

If the Contractor proposes to provide material, equipment, or method of work which deviates from the Project Manual, he shall indicate so under "deviations" on the transmittal form accompanying the submittal copies.

C. SUBMITTAL COMPLETENESS:

Submittals which do not have all the information required to be submitted, including deviations, are not acceptable and will be returned without review.

5.0 REVIEW PROCEDURE

A. GENERAL:

Submittals are specified for those features and characteristics of materials, equipment, and methods of operation which can be selected based on the Contractor's judgment of their conformance to the specified requirements. Other features and characteristics are specified in a manner which enables the Contractor to determine acceptable options without submittals. The review procedure is based on the Contractor's guarantee that all features and characteristics not requiring submittals conform as specified. Review shall not extend to means, methods, techniques, sequences or procedures of construction, or to verifying quantities, dimensions, weights or gages, or fabrication processes (except where specifically indicated or required by the Project Manual) or to safety precautions or programs incident thereto. Review of a separate item, as such, will not indicate approval of the assembly in which the item functions.

When the Contract Documents require a submittal, the Contractor shall submit the specified information as follows:

1. 5 copies of all submitted information plus one reproducible original of all information shall be transmitted with submittals for review and comment.
2. Unless otherwise specified, 3 copies of all submitted information shall be transmitted with submittals (Product Data) for information only.

B. SUBMITTALS FOR REVIEW AND COMMENT:

Unless otherwise specified, within 14 calendar days after receipt of a submittal for review and comment, the Engineer shall review the submittal and return 2 copies of the marked-up reproducible original noted in 1 above. The reproducible original will be retained by the Engineer. The returned submittal shall indicate one of the following actions:

1. If the review indicates that the material, equipment or work method complies with the project manual, submittal copies will be marked "NO EXCEPTIONS TAKEN." In this event, the Contractor may begin to implement the work method or incorporate the material or equipment covered by the submittal.
2. If the review indicates limited corrections are required, copies will be marked "MAKE CORRECTIONS NOTED." The Contractor may begin implementing the work method or incorporating the material and equipment covered by the submittal in accordance with the noted corrections. Where submittal information will be incorporated in O&M data, a corrected copy shall be provided.
3. If the review reveals that the submittal is insufficient or contains incorrect data, copies will be marked "AMEND AND RESUBMIT." Except at his own risk, the Contractor shall not undertake work covered by this submittal until it has been revised, resubmitted and returned marked either "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED."
4. If the review indicates that the material, equipment, or work method does not comply with the Project Manual, copies of the submittal will be marked "REJECTED - SEE REMARKS." Submittals with deviations which have not been identified clearly may be rejected. Except at his own risk, the Contractor shall not undertake the work covered by such submittals until a new submittal is made and returned marked either "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED."

C. SUBMITTALS (PRODUCT DATA) FOR INFORMATION ONLY:

Such information is not subject to submittal review procedures and shall be provided as part of the work under this contract and its acceptability determined under normal inspection procedures.

6.0 EFFECT OF REVIEW OF CONTRACTOR'S SUBMITTALS

Review of contract drawings, methods of work, or information regarding materials or equipment the Contractor proposes to provide, shall not relieve the Contractor of his responsibility for errors therein and shall not be regarded as an assumption of risks or liability by the Engineer or the Project Authority, or by any officer or employee thereof, and the Contractor shall have no claim under the contract on account of the failure, or partial failure, of the method of work, material, or equipment so reviewed. A mark of "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED" shall mean that the Project Authority has no objection to the Contractor, upon his own responsibility, using the plan or method of work proposed, or providing the materials or equipment proposed.

**\*\*END OF SECTION\*\***

## SECTION 01310

### PROGRESS SCHEDULES

#### 1.0 GENERAL

The Contractor shall provide with its schedule a procedural outline of the system shutdowns and proposed tie-in procedures, which shall be subject to the favorable review of the Engineer and ARC.

#### 2.0 CONSTRUCTION SCHEDULE

The Contractor shall provide a schedule meeting the minimum requirements prescribed in Section 121.00 of the Standard Specifications for Public Works Construction (Orange Book). The schedule will be submitted to the Engineer and ARC at least ten (10) working days prior to commencement of work. The schedule will require a favorable review of the Engineer and ARC.

#### 3.0 SUBMITTAL PROCEDURES

Within 20 days after the date of the Notice to Proceed, the Contractor shall complete a construction schedule conforming to paragraph 01310-2.0 and representing in detail all planned procurement and on-site construction activities. The schedule shall be prepared on reproducible paper and may be in draft form with legible freehand lines and lettering. Upon completion of the schedule, the Contractor shall submit the original and two copies to the Engineer in accordance with Section 01300.

Within 7 days after receipt of the submittal, the Engineer shall review the submitted schedule and return one copy of the marked up original to the Contractor. If the Engineer finds that the submitted schedule does not comply with specified requirements, the corrective revisions will be noted on the submittal copy returned to the Contractor for corrections and resubmittal as specified in Section 01300. Upon receipt of a schedule and breakdown of contract prices (00710-7.01 A) conforming to the contract, the Project Engineer will computerize the Contractor's scheduling and cost data. Within 14 days, the Engineer will deliver three computer reports to the Contractor. The reports will be on 8-1/2-inch by 11-inch sheets as follows:

1. Tabular listing of activities showing early and late start and finish dates.
2. Bar chart schedule of all activities.
3. Report on cost and payment status for each activity.

These reports, along with surveys and testing results will serve as the basis for the Contractor's progress payment requests. Computerization of the Contractor's schedule and furnishing reports to the Contractor by the Engineer shall not relieve the Contractor of responsibility for the adequacy of the schedule and for managing all construction activities including those of subcontractors and suppliers.

#### 4.0 WEATHER CONDITIONS

Seasonal weather conditions shall be considered in the planning and scheduling of work influenced by high or low ambient temperatures or precipitation to ensure the completion of the Work within the Contract Time. No time extensions will be granted for the Contractor's failure to take into account such weather conditions for the location of the Work and for the period of time in which the Work is to be accomplished.

Any expected loss of working days anticipated by the contractor shall be included in a separate identifiable critical activity labeled "Weather Days Allowance" to be included at the end of the project schedule. Weather Days will consist of variations in natural atmospheric weather patterns resulting in conditions that the progress of Work will pose immediate hazards to the Contractor or maintenance of Public Safety. When weather days are experienced, and are approved as such by the Engineer, the Contractor shall either:

- a. Increase the duration of the current critical activity(ies) by the number of weather days experienced, or
- b. Add a critical activity to the schedule to reflect the occurrence of the weather day(s).

The duration of the weather day allowance activity shall be reduced as weather days are experienced and included in the schedule. Any remaining weather days in the weather day allowance activity at the completion of the project shall be considered as float and shall not be for the exclusive use or benefit of either ARC or Contractor.

#### 5.0 UPDATES

##### 5.1 Submittal Period

The Contractor shall submit monthly a report of the actual construction progress. Each monthly report shall cover a period of approximately thirty (30) days. The monthly reports shall be submitted within ten (10) days after the end of the reporting period, which shall be as agreed upon by the Engineer and Contractor.

##### 5.1.1 All Monthly Updates

All monthly updates shall include as a minimum:

Narrative and Tabular Report - The report shall show the activities or portions of activities completed during the reporting period. The report shall state the percentage of the work actually completed and scheduled, the remaining duration, and the progress along the critical path in terms of days ahead or behind the allowable dates as of the report date. Changes made by the Contractor to the schedule, including durations, constraints and activity descriptions, shall be listed.

### 5.1.2 On-Schedule Updates

If the project is proceeding on schedule, the monthly update report may consist of a marked-up copy of the graphical network diagram. This submittal shall clearly indicate the status of any minor shifts in sequence or schedule and the estimated completion date or percent complete of all activities currently in progress. The Contract completion date shall also be indicated. The Contractor shall submit a narrative report relating to status of construction, the schedule, and factors which may affect the remainder of the schedule.

### 5.1.3 Delayed Schedule Updates

If, in the opinion of the Engineer, the project is behind schedule, the monthly report shall include a revised network diagram and/or mathematical analysis showing the Contractor's proposed revised schedule. The schedule shall be revised under the conditions defined in Section 01310-5.3, Schedule Revisions. An analysis of the effect that the delay has on progress along other paths shall also be included in the report. The Contractor shall also submit a narrative report with each updated analysis which shall include but not be limited to a description of current and anticipated problem areas, delaying factors and their impact, and an explanation of corrective actions taken or proposed.

## 5.2 Schedule Review

Once each month, on a date mutually agreed upon, but no later than ten (10) days after the submittal of the monthly update specified herein, a jobsite meeting will be held to review the Construction Schedule, job progress and the monthly update, or the Engineer will provide written comments on the monthly update.

## 5.3 Schedule Revisions

The conditions under which the Engineer will require revisions of the Construction Schedule include the following:

- a. When delay in completion of work items or sequence of work items results in an estimated extension of project completion by either twenty (20) working days or by five percent (5%) of the remaining duration of time to complete the Contract, whichever is less.
- b. When delays in submittals or deliveries make replanning or rescheduling of the work necessary.
- c. When the schedule does not represent actual prosecution and progress of the work.
- d. When changes to the sequence of activities, the completion date for major portions of the work, or changes occur which affect the critical path.
- e. When Contract modification necessitates schedule revision.

## 6.0 TIME IMPACT ANALYSES

When change orders are initiated, delays are experienced, or the Contractor desires to revise the schedule logic, the Contractor shall submit to the Engineer a written Time Impact Analysis illustrating the influence of each change, delay, or Contractor request on the current contract schedule completion date.

### 6.1. Construction Schedule - Analysis

- a. Each Time Impact Analysis shall include a fragmentary network analysis demonstrating how the Contractor proposes to incorporate the change order, delay, or Contractor request into the Schedule.
- b. The analysis shall demonstrate the time impact based on the date of occurrence of the change, delay or revision; the status of construction at that point in time; and the event time computation of all affected activities.
- c. The event times used in the analysis shall be those included in the latest updated copy of the Construction Schedule or as adjusted by mutual agreement between the Engineer and Contractor.

6.2 Activity time delays will not automatically mean that an extension of Contract Time is warranted or due the Contractor.

- a. It is possible that an excusable delay or contract modification will not affect existing critical activities or cause noncritical activities to become critical, i.e., a delay or modification may result in only absorbing a part of the available total float that may exist within an activity chain of the network, thereby not causing any effect on the Contract completion date or time.
- b. The Contractor acknowledges and agrees that mitigation for delays due to changes, differing site conditions, and other causes will require revision of preferential sequences of the Work. Accordingly, to mitigate delays, the activities shall be resequenced prior to the Contractor proposing an updated schedule which supports a delay to the Project as a whole. When a delay to the Project as a whole can be avoided by revising preferential sequencing, and the Contractor chooses not to implement the revisions, the Contractor will not be entitled to a time extension and will not be entitled to any compensation for this extended duration.
- c. Actual delays in activities which do not affect the critical path work or which do not move the Contractor's planned completion date beyond a milestone or the Contract completion date will not be the basis for an adjustment to the Contract time.



- d. Extensions of time can be granted for a delayed or impacted activity only for the duration of the time adjustment which exceeds the total float for the schedule path wherein the activity is located. The adjustment is only applicable during the time the delay occurred or when the change is ordered.

6.3 Time Impact Analyses shall be submitted in triplicate and within fifteen (15) days after a delay occurs or with the Contractor's cost proposal in response to a notice of change from the Engineer. In cases where the Contractor does not submit a Time Impact Analysis for a specific change order, delay, or other Contractor requested time extension within the specified period of time, then it is mutually agreed that the particular change order, delay, or Contractor request has no time impact on the Contract completion date and no time extension is required.

- a. Acceptance or rejection of Time Impact Analyses by the Engineer and ARC will be made within fifteen (15) days after receipt of the Time Impact Analysis unless subsequent meetings and negotiations are necessary.
- b. Upon acceptance, a copy of the Time Impact Analysis signed by the Engineer and ARC will be returned to the Contractor.
- c. Upon mutual agreement by both parties, schedule revisions illustrating the influence of change orders, delays, and/or Contractor requests will be incorporated into the next schedule update.

## 7.0 WEEKLY ACTIVITIES PLAN

On the last working day of each week the Contractor shall submit to the Engineer the Contractor's Plan of Activities for the following three weeks. The Plan of Activities shall describe the activity and location of the activity and include the activity's ID or Activity number as provided in the Construction Schedule.

**\*\*END OF SECTION\*\***

## SECTION 01510

### TEMPORARY UTILITIES

#### 1.0 ELECTRICAL SERVICE

All power available within the site is provided by ARC to maintain EPA operation and maintenance requirements. The Contractor shall arrange, at its own cost, with ARC to provide adequate temporary electrical service at a mutually agreeable location. The Contractor shall then provide adequate jobsite distribution facilities conforming to applicable codes and safety regulations. The Contractor shall provide, as a reimbursement to ARC, all electric power required for construction, testing, general and security lighting, and all other purposes whether supplied through temporary or permanent facilities. The proposed staging area is within 1,000 feet of a 4,160 kV service line which may be accessed for power. The alternative to this source would be portable generator.

#### 2.0 WATER

The Contractor shall construct all temporary facilities necessary to furnish water for its use during construction. No potable or construction water service is currently available in the immediate vicinity of the Contractor staging or project work areas, but is located at a distance on-site. The plan sheets show where a water stand will be located on-site south of Burch Drive with peripheral staging area for construction water. This water stand is located approximately 9,500 feet from the furthest project work area. Contractor is responsible for installing necessary fixtures and storage for meeting necessary water demands for the project. This would include any temporary or permanent conveyance or transmission facilities to diversion points closer to the project work areas. The contractor will install a water meter on the well provided by the well Owner, Don Tibbals. Reporting of this water amount will be recorded by ARC, billed and paid by ARC.

#### 3.0 TEMPORARY LIGHTING

The Contractor shall provide temporary lighting in all work areas sufficient to maintain a lighting level during working hours not less than the substantive requirement of lighting level required by Nevada Occupational Safety and Health Enforcement Section (OSHES) standards. As permanent lighting facilities are completed they may be used in lieu of temporary facilities, provided however, that bulbs, lamps, or tubes of such facilities used by the Contractor shall be replaced prior to final acceptance of the Work.

#### 4.0 HEATING AND VENTILATION

The Contractor shall provide means for heating and ventilating all work areas as may be required to protect the Work from damage by freezing, high temperatures, weather, or to provide a safe environment for workers. Unvented direct fired heaters shall not be used in areas where freshly placed concrete will be exposed to the combustion gases until at least

two hours after the concrete has attained its initial set.

#### 5.0 SANITARY CONVENIENCES

The Contractor shall provide suitable and adequate sanitary conveniences for the use of all persons at the Work site. Such conveniences shall include chemical toilets or water closets and shall be located at appropriate locations at the site of the Work. All sanitary conveniences shall conform to the regulations of the public authority having jurisdiction over such matters. At the completion of the Work, all such sanitary conveniences shall be removed and the site left in a sanitary condition.

#### 6.0 FIELD OFFICES AND SHEDS

Portable or mobile buildings constructed with floors above ground, may be provided by the Contractor in locations shown on the Plan sheets. After completion of work, the Contractor shall remove all buildings, foundations, utility services, and debris and restore areas.

**\*\*END OF SECTION\*\***

## SECTION 01520

### DUST AND EMISSIONS CONTROL/MONITORING

#### PART 1 GENERAL

Dust and emissions monitoring will be performed at the site perimeter for air quality and at specific project construction site locations for opacity, health and safety. The perimeter air quality monitoring will be conducted by ARC. The construction site dust and emissions control/monitoring will be conducted by the Contractor. This section specifies the Contractor construction site dust and emissions control/monitoring requirements.

##### 1.01 SECTION INCLUDES

- A. Vehicle/equipment emission controls shall consist of controls and maintenance performed by Contractor on vehicles/equipment to minimize the production of air pollutants in the Limits of Work.
- B. Fugitive dust controls shall consist of operations performed and products applied to the site by Contractor to minimize the generation of dust in the Limits of Work.
- C. Personal air monitoring shall consist of operations performed by Contractor to measure respirable/inhalable dust (or chemical) levels to protect its workers and subcontractors.
- D. Ambient air monitoring shall consist of operations performed by Contractor to measure ambient dust levels at key locations in the Limits of Work to verify the effectiveness of fugitive dust controls.

##### 1.02 RELATED SECTIONS

- Section 01060 - Health and Safety
- Section 01560 - Environmental Controls

##### 1.03 SUBMITTALS

- A. The Contractor shall submit evidence of compliance with applicable regulations for vehicle/equipment emission controls to the Owner's Representative for information only.
- B. The Contractor shall submit a Dust Control and Air Monitoring Plan (Plan) for approval by the Owner's Representative prior to the commencement of earthwork. The Plan shall describe the potential Work activities, Site sources (e.g., stockpiles), and ambient conditions that may generate or exacerbate fugitive dust as well as the methods that the Contractor will employ to control fugitive dust generated from Work activities. The Plan shall

describe any chemical dust suppressants, dust palliatives, and/or dust entrainment materials (including water) and application details (e.g., equipment, location, rate, and total volume). The Plan shall explain how fugitive dust control methods will be tailored to the various phases/stages of executing the Work. The Plan shall include a section that describes how the Contractor will perform personal and ambient air monitoring during the Work. The air monitoring section shall describe target analytes, action levels, sampling details (i.e., locations, procedures, equipment, and frequency), analytical methods, sampling personnel qualifications, and quality control procedures. The Plan must be signed by a Certified Industrial Hygienist (CIH).

C. The Contractor shall submit manufacturer's data and Material Safety Data Sheets (MSDS) on any proposed chemical dust suppressants, dust palliatives, and/or dust entrainment materials (excluding water) for approval by the Owner's Representative prior to use on-site.

D. The Contractor shall submit all field sampling sheets, real-time dust meter data, chains-of-custody, and analytical laboratory data (consisting of both laboratory reports and electronic data deliverables [EDDs]) associated with personal and ambient air monitoring to the Owner's Representative for information only. The real-time dust meter data for all active air monitoring stations must be submitted to the Owner's Representative (for information only) electronically on a daily basis at the end of each construction day.

#### 1.04 VEHICLE/EQUIPMENT EMISSION CONTROLS

Emissions of regulated pollutants (e.g., hydrocarbons, particulate matter, carbon monoxide, and nitrogen oxides [NO<sub>x</sub>]) may be regulated by local, state, and federal agencies for off-road construction vehicles/equipment. Emission controls on vehicles/equipment include installation of exhaust emission treatment systems (e.g., catalytic converter), proper maintenance, and use of low-sulfur diesel fuel.

#### 1.05 FUGITIVE DUST CONTROLS

Contractor work activities that have the potential to generate dust include the following:

- Earthwork activities such as excavating, loading/unloading, stockpiling, compacting, and grading;
- Wind erosion of project materials from vat leach tailings (VLT) active and reclaimed borrow piles or stockpiles staged for capping; and
- Vehicle transportation on haul roads.

Fugitive dust controls that may be implemented by the Contractor include the following:

- Placing rumble plates or rock at exits to the Limit of Work;
- Applying physical or chemical dust suppressants, dust palliatives, moisture, and/or dust entrainment materials to disturbed surfaces (upon approval by the Owners Representative);
- Covering stockpiles;

- Minimizing vehicle speed on haul roads; and
- Tarping, dry-brushing, or cleaning vehicles.

## 1.06 AIR MONITORING

The Work includes handling VLT material and hauling on roads primarily covered with VLT material. This material is typically a chemically homogenous spent ore that has been thoroughly leached during past copper mining practices. The primary consideration for handling the VLT material is the generation of fugitive dust, especially the respirable/inhalable fraction. For the ambient air monitoring required in this specification, dust is the target analyte and is defined as particulate matter with an aerodynamic diameter of 10 micrometers or less (PM<sub>10</sub>).

Measurement of PM<sub>10</sub> in ambient air at a construction site is typically conducted with a Thermo Scientific aDR-1200S aerosol meter (or equivalent) that has the following features:

- Particle size-selective inlet;
- Air pump for active sampling;
- Direct and continuous readout of PM<sub>10</sub>;
- Data logging;
- Tripod that places the inlet at 2 meters above ground;
- Weatherproof housing;
- Optional battery pack for remote locations; and
- Indicator light/audible alarm for when PM<sub>10</sub> exceeds a preset level.

Construction air monitoring is typically conducted for an 8-hour exposure period that falls within the core hours of construction activity for the targeted monitoring day. The monitoring is conducted simultaneously at multiple locations chosen in consideration of the location/type of construction activity, location of receptors, and primary site wind patterns. Meteorological monitoring, especially wind speed/direction, is conducted simultaneously with air monitoring to interpret data and any impacts from site construction activity. Air monitoring is typically conducted intensively/frequently at the start of the construction period or at the start of a new type of construction activity during the project (e.g., demolition versus excavation). Upon review of initial air monitoring results, the frequency of sampling may be reduced. Monitoring prior to the start of construction activity is important for understanding background conditions.

## PART 2 PRODUCTS

### 2.01 DUST CONTROL PRODUCTS

Physical or chemical dust suppressants, dust palliatives, and/or dust entrainment materials (excluding water) must be approved by the Owner's Representative prior to use on-

site. Materials and methods used for dust suppression shall sufficiently protect workers and site personnel and prevent the migration of dust from the Site.

## PART 3 EXECUTION

### 3.01 VEHICLE/EQUIPMENT EMISSION CONTROLS

The Contractor shall maintain proper emission control systems on construction vehicles/equipment and comply with emissions standards and regulations. It is solely the responsibility of the Contractor to comply with applicable local, state, and federal standards and regulations for vehicle/equipment air emissions.

### 3.02 FUGITIVE DUST CONTROLS

The Contractor shall implement fugitive dust controls according to the approved Dust Control and Air Monitoring Plan to minimize the generation of dust in the Limits of Work. The qualitative goal of the project is for there to be no visible dust generated from construction activities.

If it becomes necessary, in the opinion of the Owner's Representative, that additional measures are needed to control the generation of dust, the Contractor shall immediately implement such measures. The Contractor shall be prepared to implement dust control measures at any time during construction. These measures shall not be at additional cost to the Owner.

The Owner reserves the right to suspend Work at any time, if necessary, due to generation of dust that causes a safety or air quality problem or that may cause contamination of adjacent areas. Contractor shall not be entitled to any additional compensation for suspension of Work under such conditions.

The Contractor shall not conduct Work when the 15-minute average wind speed is above 25 miles per hour as measured by the ARC-maintained meteorological station at AM-6. The Owner's Representative will notify the Contractor when this wind condition occurs and issue a temporary suspension of work order for earthwork activities. Based on previous air monitoring, approximately 5 days in a calendar year have periods of 4 to 8 hours in the day when wind speeds are above 25 miles per hour. Contractor shall not be entitled to any additional compensation for suspension of Work due to the wind speed condition that affects up to, and including, 5 days of the contract period. If Work is suspended for the wind speed condition that affects a 6<sup>th</sup> or more days of the contract period, then Contractor may be entitled a contract amendment per the contract general conditions.

The Contractor shall not exceed 25 miles per hour on haul roads.

The Contractor shall cover stockpiles at night, during non-work days and during periods that the stockpiles remain inactive for more than one day. The cover shall prevent precipitation and stormwater from contacting the stockpiled material.

The Contractor shall not allow the accumulation of any track-out (i.e., visible soil/material on pavement transported by equipment and trucks) outside of the Limit of Work. Equipment, trucks and other vehicles leaving the Limit of Work area shall be tarped, dry-brushed or cleaned as appropriate to prevent trackout. If visible trackout develops on the pavement, then the Contractor shall clean the pavement with street sweepers at no cost to the Owner.

### 3.03 AIR MONITORING

The Contractor shall be responsible for conducting any personal air monitoring and supplying appropriate personal protective equipment (PPE) for the purposes of safeguarding the health and safety of its workers and subcontractors in accordance with the Contractor's HASP and applicable regulations (see Specification Section 01060).

The Contractor shall conduct ambient air monitoring (separate from any personal air monitoring) according to the Dust Control and Air Monitoring Plan for the purposes of verifying the effectiveness of fugitive dust controls. At a minimum, the Contractor shall monitor PM<sub>10</sub> at the five air monitoring stations identified in Drawing No. 138555-G-002. The rationale for these stations is summarized below.

- EP-1: located near the northern VLT borrow source. This location monitors fugitive dust that may be generated from earthwork activities at the northern VLT borrow source. This location also serves as a typical upwind location for the Thumb Pond.
- EP-2 and EP-3: located east (EP-2) and north (EP-3) of the Thumb Pond. These locations monitor fugitive dust that may be generated from capping activities and hauling near the Thumb Pond. These locations also serve as typical downwind locations for the Thumb Pond.
- EP-4 and EP-5: located south (EP-4) and north (EP-5) of Sub Area A. These locations monitor fugitive dust that may be generated from capping activities and hauling near Sub Area A. These locations also serve as typical upwind (EP-4) and downwind (EP-5) locations for the Sub Area A.

The Contractor shall use a Thermo Scientific aDR-1200S aerosol meter (or equivalent) at each of the five air monitoring stations. The inlet of the meter shall be at 2 meters above the ground surface. The Contractor shall measure and record PM<sub>10</sub> at 15-minute intervals at each station for a minimum of 8 hours during every day of construction activity. The preset level for the indicator light/audible alarm shall be programmed for an instantaneous PM<sub>10</sub> measurement of 500 µg/m<sup>3</sup>. If no construction activity is occurring near one of the stations, the Contractor may request permission from the Owner's Representative to eliminate monitoring at that station temporarily.

If a 15-minute measurement of PM<sub>10</sub> equals or exceeds 500 µg/m<sup>3</sup> at one or more stations, the Contractor must immediately implement additional dust mitigation measures and/or



modify construction work practices so that the following 15-minute measurement of PM<sub>10</sub> falls below 500 µg/m<sup>3</sup>. In addition, the Contractor must notify the Owner's Representative within one half hour of an exceedance at any station. If a 15-minute measurement of PM<sub>10</sub> equals or exceeds 1,000 µg/m<sup>3</sup> at one or more stations, the Owner's Representative may suspend work at no additional cost to the Owner. Suspension of work under this condition will continue until the cause of dust is determined and the appropriate construction work practices and health and safety precautions are agreed upon by the Contractor and Owner's Representative.

\*\*\* END OF SECTION \*\*\*

## SECTION 01550

### ACCESS ROADS AND PARKING AREAS

#### 1.0 ACCESS ROADS AND FENCES

Contractor shall submit Traffic Control Plan(s) and implement the accepted plan(s) prior to initiating any road grading activities. Roads subject to interference by execution of work covered by this Contract shall be kept open, and fences subject to interference shall be maintained by the Contractor during the work and shall be replaced to their original condition unless specifically shown otherwise on the Drawings. Such signs, berms and barricades as are required by 30 CFR 56.9300, local laws and as necessary for the safe prosecution of the Work shall be provided. Excavated dirt shall not be stored on roads, paths, or planted areas. Care shall be taken to protect improvements.

Unless otherwise indicated, all Contractor personnel and equipment shall enter and leave the project site via existing roads through the North Main Gate. Upon the regrading, recontouring, or reclamation of any part of the site, further vehicular use shall be limited to that necessary to complete operations. Any access routes that are determined by the Engineer to be maintained throughout the project duration shall be left in as good or better condition than the condition before the start of the project. Existing roads and trail shall be used wherever possible.

New roads shall be constructed per the directions provided on the Plan sheets; the Engineer shall be informed immediately upon any significant discrepancies between the Plan sheets and field conditions. All road grading is subject to Grading Disturbance Permits (GDP) unless specifically exempt under conditions listed in the Plans for existing maintenance access roads and proposed tailings pond access roads. Top dressing shall be stripped and stockpiled before blading as directed by the Engineer. All unspecified roads, trails or travel routes shall be regarded to approximate original contours, reclaimed and revegetated, as necessary, in conformance with the Specifications at no additional cost.

#### 2.0 PARKING AND STAGING AREAS

Contractor parking for private vehicles shall be maintained in the lot south of Burch Lane across from the North Main Gate. The Contractor will provide shuttle service on to the restricted access mine site project work area. The Contractor will be responsible for including this area in the Traffic Control Plan (TCP) to provide safe operation of this area with adjacent Burch Lane. Temporary staging within this parking area is limited to day operations for vendors and subcontractors to coordinate with the Contractor prior to moving materials and equipment to primary staging areas located in the restricted access area. No overnight storage or delivery after working hours are permitted within this non-secured parking area. Contractor shall implement TCP prior to using, storing or mobilizing to on-site staging areas.

### 3.0 PUBLIC ACCESS AT SITE FACILITY

NOT USED

\*\*\* END OF SECTION \*\*\*

## SECTION 01560

### ENVIRONMENTAL PERMITS AND CONTROLS

#### 1.0 GENERAL CERCLA SITE PERMITTING REQUIREMENTS

The Yerington Mine Site is an abandoned CERCLA mine site under EPA jurisdiction. In accordance with OSWER Directive 9355.7-03 EPA is the over riding authority for reviewing and issuing permits for removal actions on CERCLA sites. The EPA in the reference directive requires that the applicant meet the substantive requirements of the local, state or federal permit requirements. The applicant should prepare the permit application addressing these requirements and submit them to EPA as a work plan for subsequent approval. ARC has reviewed the design contained within the Plan Specifications with EPA in obtaining the implied permits necessary but the Contractor will still be responsible for completing several permits necessary for local and state requirements. Two examples include a Storm Water Pollution Prevention Plan (SWPPP) and a Dust Mitigation Plan. Contractor shall provide required prepared plans to ARC for submittal to EPA. The Contractor is directed to include 10 working days from the time of ARC submittal to EPA for response back. ARC shall not be responsible for time or expense for plan resubmittals to EPA requiring revisions for plan approval.

#### 2.0 SITE CLEANING & MAINTENANCE

Contractor shall keep the work site clean and free from rubbish and debris. Materials and equipment shall be removed from the site when they are no longer necessary. Upon completion of the work and before final acceptance, the work site shall be cleared of equipment, unused materials, and rubbish to present clean and neat appearance. The Contractor shall assure the cleanup and removal of all spillages and solid debris to an approved disposal site at the end of each contract work day.

#### 2.0 TEMPORARY DAMS

NOT USED

#### 3.0 AIR POLLUTION CONTROL

Contractor shall not discharge smoke, dust, and other contaminants into the atmosphere that violate the regulations of any legally constituted authority. Contractor shall submit a dust mitigation and air monitoring plan in compliance with Technical Section 01520. This plan will be submitted to the EPA as outlined in Section 1.0.

#### 4.0 NOISE CONTROL

No noise generating activities shall occur between the hours of 7:00 p.m. and 8:00 a.m. within 300 feet of a residence.

## 5.0 DRAINAGE CONTROL

In excavation, fill, and grading operations care shall be taken to disturb the pre-existing drainage pattern as little as possible. Particular care shall be taken not to direct drainage water onto private property or into streets or drainage ways inadequate for the increase flow. Drainage means shall be provided to protect the Work.

## 6.0 EROSION CONTROL

The Contractor will need to prepare a Storm Water Pollution Prevention Plan (SWPPP) meeting the substantive requirements for the Nevada Department of Environmental Protection. The plan will be submitted as described in Section 1.0 above and should include:

- 6.1 All excavated areas shall be provided with temporary erosion control measures.
- 6.2 Temporary erosion control shall be required for all areas where natural ground cover is disturbed, all temporary excavation stockpiles, including structures and trench excavations.
- 6.3 Erosion control shall be by means of filter fabric fences or hay bales placed to completely circumvent the downslope side of any excavated stockpile.
- 6.4 Protected areas shall be regularly inspected and maintained by the Contractor during the course of the work.
- 6.5 All excavations, spills, and waste materials shall not be placed in areas subject to washout, flooding or natural drainage.

## 7.0 TRAFFIC CONTROL

Traffic control shall be in accordance with the Nevada Department of Transportation and the Manual of Uniform Traffic Control Devices (MUTCD) and as specified in Section 02800. Traffic control shall include signs, warning lights, reflectors, barriers, and other necessary safety devices and measures, including flaggers to direct vehicular traffic through the construction areas.

No material or equipment shall be stored/parked where it will interfere with the free and safe passage of mine site traffic, and at the end of each day's work, and at other times when construction operations are suspended for any reason, the Contractor shall remove all equipment and other obstructions from heavily traveled maintenance roadways.

Should the Contractor appear to be negligent in furnishing warning and protective measures, as above provided, the Engineer may direct attention to the existence of a hazard, and the necessary warning and protective measures shall be furnished and installed by the Contractor at its expense.

**\*\*END OF SECTION\*\***

## SECTION 01700

### RESTORATION OF IMPROVEMENTS

#### 1.0 STRUCTURES

The Contractor shall take all precautions necessary to protect the integrity and usefulness of all existing plant facilities. If necessary, the Contractor may, with the approval of the Owner, remove such existing structures, including curbs, gutters, pipelines and utility poles as may be necessary for the performance of the work, and shall rebuild the structures thus removed in as good a condition as found with the requirements specified. He shall also repair existing structures which may be damaged as a result of the work under this contract.

#### 2.0 HAUL ROADS

All haul roads shall receive grading and appurtenant drainage maintenance to repair and stabilize all Contractor impacted travelways. Repairs shall include installation of appropriate best management practices (BMP's) for control of storm water. Temporary construction traffic controls shall remain in place until the Contractor has demonstrated that all major equipment (Larger than 1-ton pick up truck or Case 450 backhoe) has been removed from the site. Contractor shall notify Project Engineer in writing when this has occurred to conduct a site tour for returning Traffic Control back to on-site maintenance personnel.

#### 3.0 CULTIVATED AREAS AND OTHER SURFACE IMPROVEMENTS

Cultivated or planted areas and other surface improvements which are damaged by actions of the Contractor shall be restored as nearly as possible to their original condition. Restoration shall take place within 1 week or sooner as directed by the Engineer.

Existing guard posts, barricades, and fences shall be protected and replaced if damaged.

#### 4.0 PROTECTION OF EXISTING INSTALLATIONS

The Contractor shall protect all existing operating facilities and structures from damages. However, if damage occurs, the Contractor shall immediately correct or replace existing equipment, controls, systems, structures, or facilities which are damaged in any way as a result of his operations.

**\*\*END OF SECTION\*\***

## SECTION 01710

### FINAL CLEANUP

#### 1.0 GENERAL

At the completion of work and immediately prior to final inspection, cleaning of the entire project shall be accomplished according to the following provisions:

1. Contractor shall demobilize and remove all equipment, materials, spills, supplies, and trash from the project site and shall reclaim all areas disturbed by the Contractor's activities. Unless otherwise specified, developed, maintained roads that existed before commencement of the Contractor's activities need not be reclaimed, but must be left in a condition equal to or better than what existed before the Contractor's activities began.
2. Fences, gates, plants, and other surface material disrupted by these operations shall be replaced or restored to original or better conditions immediately upon completion of work at the site.
3. All site identification signs, barricades, tools, rubbish collection receptacles and other such items shall be removed by Contractor.
4. All remaining earthen stockpiles of excess excavated material shall be graded to provide gentle slopes to prevent erosion as directed by Engineer.
5. All clean-up, repair, or replacement work shall be done at the Contractor's expense and to the satisfaction of the Engineer pending approval of the appropriate public officials and property owners.
6. ARC will not authorize final payment until Contractor has removed all rubble and debris from the site and adjoining work areas, including all temporary storage and parking areas used by Contractor.

#### 2.0 OWNER OCCUPANCY

Unless maintenance access road has been substantially improved, Contractor shall remove all temporary cover protections and restore maintenance access roads within LEP to pre-construction access condition.

#### 3.0 POST-CONSTRUCTION REPAIRS

The Contractor shall make such minor repairs and alterations as may be necessary to make systems listed in Section 1014 Paragraph functional due to damage or isolation as a result of Contractor construction activity.

#### 4.0 SITE CLEANUP

For all roadway work, the Contractor shall conform the work to acceptable line and grade, as determined by the Engineer. ARC will not authorize final payment until the Contractor has removed all rubble and debris from the project work areas, including all temporary storage and parking areas used by the Contractor.

All temporary utility drops, fencing, and water supply outlets shall be removed.

All remaining earthen stockpiles of excess excavated material shall be graded to provide gentle slopes to prevent erosion as directed by the Engineer.

**\*\*END OF SECTION\*\***



## SECTION 01720

### PROJECT RECORD DOCUMENTS

#### 1.0 RECORD PLANS AND SPECIFICATIONS

The Contractor shall solely dedicate and maintain one set of full size prints as “Record Drawings” and mark thereon the actual work, including any deviations from plan dimensions, elevations or orientations. The Contractor shall solely dedicate and maintain one copy of the Technical Specifications as “Record Specifications” therein indicating actual products used, including manufacturer, model number, and options. The Record Drawings and Record Specifications shall be submitted in excellent condition to the Engineer upon completion of the job as a condition of acceptance of the Project. Marked prints and the Project Manual shall be updated at least once each week and shall be available to the Engineer for review. Failure of the Contractor to keep current with the updating shall constitute grounds for withholding monies from partial payment estimates.

#### 2.0 WEATHER RECORDS

The Contractor is responsible for maintaining a daily log for weather records such as Temperature, Precipitation, Humidity, and Wind Speed. When work is completed, the Contractor shall submit all project record documents to the Engineer.

**\*\*END OF SECTION\*\***

## SECTION 01800

### ENVIRONMENTAL CONDITIONS

This section describes the environmental conditions which have been observed at the site of the work and which may reasonably be anticipated throughout the life of the project. However, other, more extreme conditions may occur at the site.

The site of the work is at approximate elevations of 4,300 to 4,600 feet above mean sea level. Climate conditions are described as follows:

Description	Range of Conditions
Average Minimum Range	17.6 degrees to 52.3 degrees F
Average Mean	33.7 degrees F
Average Maximum	46.2 degrees to 92.1 degrees F
Average Mean	68.8 degrees F
Precipitation (inches)	
Annual Average	5.08
24 Hour, 100 Year Event	2.8
Snowfall Average	6.7
Average Wind Speed	5.6 – 8.6 mile per hour
Barometric pressure, inches, mercury	29.9

\* As reported for Fallon NAS by Desert Research Institute

The information provides average conditions for wind, temperature and precipitation. The Contractor is directed to the following website to obtain additional weather data for incorporating data required for anticipating conditions which may impact Contractor's means or methods to implement the project work.

**\*\*END OF SECTION\*\***

## SECTION 01999

### REFERENCE FORMS

The forms listed below and included in this section are referenced from other sections of the project manual:

<u>Form No.</u>	<u>Title</u>
01300-A	Submittal Transmittal Form

Submittal Description: \_\_\_\_\_

Submittal No:<sup>1</sup> \_\_\_\_\_

Spec Section: \_\_\_\_\_

	Routing	Sent	Received
OWNER:	Contractor/CM		
PROJECT:	CM/Engineer		
	Engineer/CM		
CONTRACTOR:	CM/Contractor		

We are sending you ☐ Attached ☐ Under separate cover via \_\_\_\_\_.

☐ Submittals for review and comment

☐ Product data for information only

Remarks: \_\_\_\_\_

Item	Copies	Date	Section No.	Description	Review action <sup>a</sup>	Reviewer initials	Review comments attached

<sup>a</sup>Note: NET = No exceptions taken; MCN = Make corrections noted; A&R = Amend and resubmit; R = Rejected Attach additional sheets if necessary.

**Contractor**

Certify either A or B:

- ☐ A. We have verified that the material or equipment contained in this submittal meets all the requirements, including coordination with all related work, specified (no exceptions).
- ☐ B. We have verified that the material or equipment contained in this submittal meets all the requirements specified except for the attached deviations.

No.Deviation

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Certified by: \_\_\_\_\_

Contractor's Signature

<sup>1</sup>See paragraph 01300-4.0 A, Transmittal Procedure.

**\*\*END OF SECTION\*\***